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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,323	03/06/2002	Steven M. Zink	02SW049	9035

7590 07/09/2009
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EXAMINER

TRUONG, LAN DAI T

ART UNIT	PAPER NUMBER
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2452

MAIL DATE	DELIVERY MODE
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07/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/092,323	Applicant(s) ZINK ET AL.	
	Examiner LAN-DAI Thi TRUONG	Art Unit 2452	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-19, 21, 22, 24-28, 31 and 33-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-19, 21-22, 24-28, 31, 33-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/20/2009 has been entered.

2. This action is response to communications: application, filed on 03/06/2002; amendment filed on 04/20/2009. Claims 1-7, 9-19, 21-22, 24-28, 31 and 33-39 are pending; Claims 8, 20, 23, 29-30 and 32 are canceled; claims 1, 15, 21, 31 and 33 are amended.

3. The applicant's arguments filed on 04/20/2009 have been fully considered, but they are moot in view of new ground for rejections.

Response to arguments

4. The previous rejection under 35 USC § 112 is withdrawn responding to applicant's amendments to claims 1 and 33 to overcome the previous rejections-35 USC § 112.

Claim rejections-35 USC § 112, first paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-7, 9-19, 21-22 and 24-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Regarding claims 1 and 21:

The claim(s) contains subject matter (i.e. “**only**”) which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Nowhere in the specification teach the use of employing **only** the handle information as a reference. Without disclosure the use of how to employing **only** the handle information as a reference from the specification; how would one of ordinary skill in the art determine claimed subject matter of “the component receives handle information from the industrial controller relating to the selected data items and employs only the handle information as a reference with consistent length to generate an update data packet to update data locations in the industrial controller”. Appropriate corrections are required.

Regarding claims 2-7 and 9-19, 22 and 24-28:

Those claims are rejected under rationales of claims 1 and 21.

Claim rejections-35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-12, 14-19, 21, 31 and 33-39 are rejected under 35 U.S.C 103(a) as being un-patentable over Carter et al. (U.S. 6,201,996) in view of Harvey et al. (U.S. 6,611,739) and further in view of Vaughn et al. (U.S. 4,908,746).

Regarding claim 1:

Carter discloses the invention substantially as claimed, including an industrial control system, comprising:

a processor: (“CPU” reads on ‘processor’ as claimed: Carter, figure 1, item 112).

a computer readable storage medium operationally coupled to the processor and storing computer executable instructions, the computer executable instructions, when executed by the processor, implement components comprising:

a primary aggregation component associated with an industrial controller; the primary aggregation component is created, via the processor, and defined in response to a query received from an entity remote to the industrial controller and is installed on the industrial controller: (a visual presentation control template is used to define/ or modifying control functions of the industrial controller. It is essential to understand that one or more component/objected should be created within the control template to collect/aggregate /and hold selected data those are selected by a remote user: Carter, abstract, figure 2; column 3, lines 62-65; column 4, lines 6-8, 40-70; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

However, Carter does not explicitly disclose aggregating one or more selected data items into an aggregated subset of data items according to a memory address of a first data item in a group, followed by a length and then followed by values relating to the data items in the group;

Art Unit: 2452

adding at least one secondary aggregation component at the industrial controller based upon at least one of increased data demands and network protocol considerations.

In analogous art, Harvey discloses method of aggregating selected data into an aggregate data. It is essential to understand that aggregating data should be aggregated according to memory addresses, allowed data memory length and values relating to aggregated data. It is also important to understand that if data demands and network protocol are increased, then one or more aggregation component should be added into the system in order to be able to handle data demands, see (Harvey, abstract).

a communications component associated with the remote entity, the communications component transmits the aggregated subset of data items via a singular communications packet across a network: (transmitting the aggregate data over a network. It is essential to understand that Harvey's system should include at least one communication component which supports for transmitting the aggregate data over the network: Harvey, column 16, lines 60-67).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Harvey's ideas of aggregating data for transmitting over network into Carter's system in order to provide an efficient centralize control system, see (Harvey, column 3, lines 20-39).

However, Carter-Harvey does not explicitly disclose a component associated with the remote entity, the component receives handle information relating to the selected data items and employs only the handle information as a reference with handle information consistent length to generate an update data packet to update data locations.

Art Unit: 2452

In analogous art, Vaughn discloses receiving issue command including index buffer pointer and value buffer pointer. The index buffer pointer indicates where the data to be stored, see (Vaughn, column 18, lines 60-67) (where, “index buffer pointer” reads on ‘handle information’ as claimed).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Vaughn’s ideas of using the index buffer pointer as handle information reference to indicate location for storing data into Carter-Harvey’ system in order to provide a fast responsive and flexible industrial control system see (Vaughn, column 1, lines 44-46).

Regarding claim 33:

Carter discloses the invention substantially as claimed, including an industrial controller, comprising:

a processor: (“CPU” reads on ‘processor’ as claimed: Carter, figure 1, item 112).

a computer readable storage medium storing computer executable instructions, the computer executable instructions, when executed by the processor, implement components comprising:

a first component that processes information received from a remote entity: (throughout webpage presentations/templates, remote users can access and influence control functions for a industrial controller by modifying control parameters / and procedure functions. It is essential to understand that the industrial controller should include at least one component/object therefrom inputs, received from the remote users, are collected and temporary held: Carter, abstract, figure

Art Unit: 2452

2; column 3, lines 62-65; column 4, lines 6-8, 40-70; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

the primary aggregation component defined and installed at the industrial controller by an entity remote from the industrial controller: (throughout webpage presentations/templates, the industrial controller receives inputs from remote users. It is essential to understand that at least one object/component is created responding to remote users webpage presentations/templates accesses. The created object/component is used to collect data inputs from the remote users: Carter, abstract, figure 2; column 3, lines 62-65; column 4, lines 6-8, 40-70; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

However, Carter does not explicitly disclose aggregating one or more selected data items into an aggregated subset of data items according to a memory address of a first data item in a group, followed by a length and then followed by values relating to the data items in the group; adding at least one secondary aggregation component at the industrial controller based upon at least one of increased data demands and network protocol considerations.

In analogous art, Harvey discloses method of aggregating selected data into an aggregate data. It is essential to understand that the data should be aggregated according to memory addresses, allowed data memory length and values relating to aggregated data. It is also important to understand that if data demands and network protocol are increased, then one or more aggregation component should be added into the system in order to be able to handle data demands, see (Harvey, abstract).

a communications component associated with the entity remote from the controller, the communications component transmits the subset of data items via a singular communications

Art Unit: 2452

packet across a network: (transmitting the aggregate data over a network. It is essential to understand that Harvey's system should include at least one communication component which supports for transmitting the aggregate data over the network: Harvey, column 16, lines 60-67).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Harvey's ideas of aggregating data for transmitting over network into Carter's system in order to provide an efficient centralized control system, see (Harvey, column 3, lines 20-39).

However, Carter-Harvey does not explicitly disclose a component associated with the remote entity, the component receives handle information relating to the selected data items and employs only the handle information as a reference with handle information consistent length to generate an update data packet to update data locations.

In analogous art, Vaughn discloses receiving issue command including index buffer pointer and value buffer pointer. The index buffer pointer indicates where the data to be stored, see (Vaughn, column 18, lines 60-67) (where, "index buffer pointer" reads on 'handle information' as claimed).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Vaughn's ideas of using the index buffer pointer as handle information reference to indicate location for storing data into Carter-Harvey's system in order to provide a fast responsive and flexible industrial control system see (Vaughn, column 1, lines 44-46).

Regarding claim 21:

Carter discloses the invention substantially as claimed, including a method to facilitate data communications with an industrial controller, comprising:

employing a processor executing computer executable instructions stored on a computer readable storage medium to implement the following acts:

requesting tag information from a controller: (control functions is defining/ or modifying in the industrial controller: Carter, abstract, figure 2; column 3, lines 62-65; column 4, lines 6-8, 40-70; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

building an object from the tag information; installing the object: (it is essential to understand that at least one object/component is created and installed into the industrial controller responding to remote users logging/ interactions with the webpage presentations/template. The created object/ component is used to collect data inputs from the remote users: Carter, abstract, figure 2; column 3, lines 62-65; column 4, lines 6-8, 40-70; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

updating object data on the controller: (throughout webpage presentations/ templates, the remote users could modifying control functions of the industrial controllers: Carter, abstract, figure 2; column 3, lines 62-65; column 4, lines 6-8, 40-70; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

receiving data from the object that has been updated by the controller: (control machine receives modified data: Carter, column 10, lines 35-52).

However, Carter does not explicitly disclose adding data items of interest to the object, the data items arranged according to at least one of contiguous or non-contiguous address memory locations.

In analogous art, Harvey discloses method of aggregating selected data into an aggregate data. It is essential to understand that the data should be aggregated according to memory addresses, see (Harvey, abstract).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Harvey's ideas of aggregating data for transmitting over network into Carter's system in order to provide an efficient centralized control system, see (Harvey, column 3, lines 20-39).

However, Carter-Harvey does not explicitly disclose receiving handle information from the relating to the selected data items; and employing only the handle information as a reference with consistent length to generate an update data packet to update data locations.

In analogous art, Vaughn discloses receiving issue command including index buffer pointer and value buffer pointer. The index buffer pointer indicate where the data to be stored, see (Vaughn, column 18, lines 60-67) (where, "index buffer pointer" reads on 'handle information' as claimed).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Vaughn's ideas of using the index buffer pointer as handle information reference to indicate location for storing data into Carter-Harvey's system in order to provide a fast responsive and flexible industrial control system see (column 1, lines 44-46).

Regarding claim 31:

Carter discloses the invention substantially as claimed, including a system to facilitate data communications with an industrial controller, comprising:

a processor: (“CPU” reads on ‘processor’ as claimed: Carter, figure 1, item 112).

a computer readable storage medium storing computer executable instructions, the computer executable instructions, when executed by the processor, implement components comprising:

means for installing the optimized data packet on the controller: (defining/ or modifying control functions of the industrial controller. It is essential to understand that at least one object/component is created and installed into the industrial controller responding to remote users logging/ interactions to be able to collect data inputs from the remote users: Carter, abstract, figure 2; column 3, lines 62-65; column 4, lines 6-8, 40-70; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

means for refreshing the optimized data packet on the controller: (throughout webpage presentations/ templates, the remote users could modifying control functions of the industrial controllers: Carter, abstract, figure 2; column 3, lines 62-65; column 4, lines 6-8, 40-70; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

However, Carter does not explicitly disclose means for adding data items of interest to the data packet, the data items arranged according to at least one of contiguous or non-contiguous address memory locations.

In analogous art, Harvey discloses method of aggregating selected data into an aggregate data. It is essential to understand that the data should be aggregated according to memory addresses, see (Harvey, abstract).

means for transmitting data from the optimized data packet that has been refreshed by the controller: (transmitting the aggregate data over a network. It is essential to understand that Harvey's system should include at least one communication component which supports for transmitting the aggregate data over the network: Harvey, column 16, lines 60-67).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Harvey's ideas of aggregating data for transmitting over network into Carter' system in order to provide an efficient centralize control system, see (Harvey, column 3, lines 20-39).

However, Carter-Harvey does not explicitly disclose means for requesting, by the processor, tag identifiers from a controller.

In analogous art, Vaughn discloses the index buffer pointer used to indicate where the data to be stored, see (Vaughn, column 18, lines 60-67) (where, "index buffer pointer" reads on 'tag identifiers' as claimed).

means for constructing an optimized data packet from the tag identifiers requested from the controller: (constructing a command based upon buffer index numbers indicating the elements should be transferred: Vaughn, column 18, lines 54-67; column 19, lines 1-5).

means for updating the controller via employment of handle information as a reference with consistent length: (the index buffer pointer used to indicate where the data to be stored: Vaughn, column 18, lines 60-67) (where, "index buffer pointer" reads on 'handle information' as claimed).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Vaughn's ideas of using the index buffer pointer as handle

Art Unit: 2452

information reference to indicate location for storing data into Carter-Harvey' system in order to provide a fast responsive and flexible industrial control system see (Vaughn, column 1, lines 44-46).

Regarding claim 2:

In addition to rejection in claim 1, Carter-Harvey-Vaughn further discloses the entity is a client application that selects and requests the subset of data items from the controller: (Carter discloses the remote computer can modifies control parameters of action procedures/ of control structures: abstract; column 3, lines 58-67; column 4, lines 45-67; column 9, lines 60-67; column 10, lines 7-52; column 11, lines 28-67; column 12, lines 1-9; column 5, lines 52-67).

Regarding claim 3:

In addition to rejection in claim 2, Carter-Harvey-Vaughn further discloses the client application is at least one of a data logging application and a Human and Machine Interface (HMI) that interacts with the industrial controller: (Crater discloses a webpage presentation/templates used as user communication interfaces: figure 2, items 215, 210; figure 3, item 300).

Regarding claim 4:

In addition to rejection in claim 2, Carter-Harvey-Vaughn further discloses a communications server adapted to interact with the client application, the network and the industrial controller, the industrial controller including a communications driver to interface with the communications server and the network: (Crater discloses a network interface/ or machine interface adapted to communicate with server and remote computer: figure 2, items 215, 210; figure 3, item 300).

Regarding claim 5:

In addition to rejection in claim 1, Carter-Harvey-Vaughn further discloses the communications component sends a data request to the industrial controller relating to the subset of data items: (the remote users could modifying control functions of the industrial controllers: Carter, abstract, figure 2; column 3, lines 62-65; column 4, lines 6-8, 40-70; column 9, lines 20-67; column 10, lines 30-53; column 11, lines 58-60; column 12, lines 5-10).

Regarding claim 6:

In addition to rejection in claim 5, Carter-Harvey-Vaughn further disclose sending a response to the request including at least one of tag and value information associated with the tag, the tag and value information relating to the subset of data items: (Vaughn discloses received issue command including index buffer pointer and value buffer pointer. The index buffer pointer indicate where the data to be stored: Vaughn, column 18, lines 60-67).

Regarding claim 7:

In addition to rejection in claim 6, Carter-Harvey-Vaughn further discloses employing the tag and value information received in the response to build the primary aggregation component on the industrial controller: (using the index buffer pointer as handle information reference to indicate location for storing data: Vaughn, column 18, lines 60-67).

Regarding claim 9:

In addition to rejection in claim 1, Carter-Harvey-Vaughn further discloses the removing the one or more secondary aggregation components based upon decreased data demands: (it is essential to understand that if data demands and network protocol are increased, then new aggregation component should be added into the system in order to be able to handle aggregating

Art Unit: 2452

data. Vice versa, aggregation component will be removed if decreasing data demands, see (Harvey, abstract).

Regarding claim 10:

In addition to rejection in claim 1, Carter-Harvey-Vaughn further discloses at least one of dynamically increasing and decreasing the amount of selected data items in the primary aggregation component based upon data demands received from the network: (it is essential to understand that the amount of selected data items are dynamically increasing and decreasing: Harvey, abstract).

Regarding claim 11:

In addition to rejection in claim 1, Carter-Harvey-Vaughn further discloses an object including at least one of class attributes, instance attributes, services and a data buffer: (Carter, column 11, lines 1-15).

Regarding claim 12:

In addition to rejection in claim 11, Carter-Harvey-Vaughn further discloses the class attributes supply information such as revision level information of the object, an instance number, and a number of instances of an associated class: (Carter, column 11, lines 1-15).

Regarding claim 14:

In addition to rejection in claim 11, Carter-Harvey-Vaughn further discloses the services include at least one of Get All Attributes, Get All List, Set Attributes List, Reset, Start, Stop, Create Object and Delete Object: (Carter, column 35, lines 45-50).

Regarding claim 15:

Art Unit: 2452

In addition to rejection in claim 11, Carter-Harvey-Vaughn further discloses the data buffer including at least one of 1 to L data items, L being an integer greater than 1, and includes at least one of the following types: single valued elements, bit, byte, 16 bit, 32 bit, greater than 32 bit configurations, unsigned integers, signed integers, floating point elements, single dimension array, multiple dimension array configurations, and user defined tags (UDT): (Vaughn, column 18, lines 49-67).

Regarding claim 16:

In addition to rejection in claim 15, Carter-Harvey-Vaughn further discloses the single valued elements include at least one of a tag identifier and an associated value: (Vaughn discloses received issue command including index buffer pointer and value buffer pointer. The index buffer pointer indicate where the data to be stored: Vaughn, column 18, lines 60-67).

Regarding claim 17:

In addition to rejection in claim 15, Carter-Harvey-Vaughn further discloses the single dimension arrays include at least one of an array element ID, a value, a begin array element ID and a length: (Vaughn, column 18, lines 60-67).

Regarding claim 18:

In addition to rejection in claim 1, Carter-Harvey-Vaughn further discloses removing the primary aggregation component based upon at least one of a loss of communications and a connection timeout: (it is essential to understand that the system will remove one or more aggregation component based upon at least one of a loss of communications and a connection timeout: Harvey, abstract).

Regarding claim 19:

In addition to rejection in claim 1, Carter-Harvey-Vaughn further discloses removing the primary aggregation component based upon an explicit command: (it is essential to understand that the system will remove one or more aggregation component in response to a command: Harvey, abstract).

Regarding claim 34:

In addition to rejection in claim 33, Carter-Harvey-Vaughn further discloses the first component is a processor adapted to provide access to a variable memory associated with the controller, the variable memory storing the one or more selected data items: (aggregating selected data into an aggregate data: Harvey, abstract).

Regarding claim 35:

In addition to rejection in claim 34, Carter-Harvey-Vaughn further discloses the processor interacts with the communications component to aggregate and transmit the subset of data items, the communications component is a communications driver configured for the network: (transmitting aggregated data over a network: Harvey, abstract).

Regarding claim 36:

In addition to rejection in claim 35, Carter-Harvey-Vaughn further discloses the network is at least one of an Ethernet, ControlNet, a DeviceNet, RS-232, RS-422, RS-485: (industrial control network: Carter, abstract).

Regarding claim 37:

In addition to rejection in claim 36, Carter-Harvey-Vaughn further discloses the communication driver adapted to communicate with a communications server associated with a

Art Unit: 2452

client application: (network interface/ or machine interface adapted to communicate with a server and remote computer: Carter, figure 2, items 215, 210; figure 3, item 300).

Regarding claim 38:

In addition to rejection in claim 37, Carter-Harvey-Vaughn further discloses the client application is a Human and Machines Interface: (Carter: column19, line 27)

Regarding claim 39:

This claim is rejected under rationales of claim 33.

Regarding claim 22:

In addition to rejection in claim 21, Carter-Harvey-Vaughn further discloses interacting over a network connection: (Carter, column 4, lines 65-67).

Regarding claim 24:

In addition to rejection in claim 21, Carter-Harvey-Vaughn further discloses updating the object via at least one of a periodic occurrence, an event driven occurrence, and a request: (updating control parameter in response to a request: Carter, column 10, lines 34-35).

Regarding claim 25:

In addition to rejection in claim 21, Carter-Harvey-Vaughn further discloses removing the object from the controller when a client no longer requests data items of interest: (it is essential to understand that the system will remove one or more object if there is no more request data of interest: Harvey, abstract).

Regarding claim 26:

In addition to rejection in claim 21, Carter-Harvey-Vaughn further discloses removing the object based upon at least one of an event and network connections being disrupted for a time

Art Unit: 2452

period that is greater than a predetermined amount of time that is configured at the controller: (it is essential to understand that the system will remove one or more object if there is lost communication connection: Harvey, abstract).

Claim 27-28 are rejected under 35 U.S.C 103(a) as being un-patentable over Carter-Harvey-Vaughn in view of McCoskey et al. (U.S. 2003/0028889).

Regarding claim 27:

Carter-Harvey-Vaughn discloses the invention substantially as disclosed in claim 21, but does not explicitly teach placing data items of interest in a scanning list.

In analogous art, McCoskey discloses method of placing suggestion data in a scan list, see (McCoskey, [0094]).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine McCoskey's ideas of placing suggestion data in a scan list into Carter-Harvey-Vaughn's system in order to save development time and resource by implying McCoskey's ideas into Carter-Harvey-Vaughn's system.

Regarding claim 28:

In addition to rejection in claim 21, Carter-Harvey-Vaughn-McCoskey further discloses the list indicates which data items are to be periodically updated: (McCoskey, [0094]).

Claim 13 is rejected under 35 U.S.C 103(a) as being un-patentable over Carter-Harvey-Vaughn in view of Bhatt et al. (U.S. 6,097,399).

Regarding claim 13:

Carter-Harvey-Vaughn discloses the invention substantially as disclosed in claim 11, but does not explicitly teach the instance attributes include setting for at least one of object update

Art Unit: 2452

times, event triggers, whether to update the object based on rate, demand and other criteria, where in a data stream triggers are located, whether to continue on an overflow, number of drivers currently installed, timestamp information, size of buffers, start times, and object lifetime settings.

In analogous art, Bhatt discloses method of aggregating data item to produces an aggregated data based on intervals, see (column 5, lines 11-14; column 6, lines 1-17).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Bhatt's ideas of producing an aggregated data from selected data items into Carter-Harvey-Vaughn's system in order to speed up transmitting time, see (Bhatt, column 4, lines 45-55).

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAN-DAI THI TRUONG whose telephone number is (571)272-7959. The examiner can normally be reached on Monday- Friday from 8:30am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2452

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07/05/2009.

Ldt.

/Kenny S Lin/

Primary Examiner, Art Unit 2452